

# A Comparison of PostgreSQL 9.0 and MySQL 5.5

## An EnterpriseDB White Paper

For DBAs, Application  
Developers, and  
Enterprise Architects

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**EnterpriseDB<sup>®</sup>**

The Enterprise PostgreSQL Company

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## Introduction

This paper compares the PostgreSQL Community Server 9.0 and Postgres Plus Advanced Server 9.0 against MySQL 5.5. The comparison is broken down into the following sections with a short commentary following each section:

- General Comparison Commentary
- Core Database Features
- Database Capacities
- Transaction Management and Control
- Query Capabilities
- Business Intelligence / Data Warehousing Support
- Network/Distributed Services
- Bulk Data Management / Protection
- Security Features
- DBA Tools
- Developer Tools
- Scalability Solutions
- High Availability Solutions
- Open Source Community

## General Comparison Commentary

The PostgreSQL based databases and accompanying software, in general, have a long and consistent history of providing enterprise grade mission critical features and performance based on the long-standing general purpose open source RDBMS PostgreSQL (pronounced 'PostgreS-Q-L'). Postgres Plus Advanced Server show the benefits of what a truly open source community can provide in terms of features, quality, stability, and steady release progress without undue influence from any single commercial entity.

MySQL has focused more on delivering 'good enough and easy enough' software for application developers in a Web 2.0 centric world, while PostgreSQL has concentrated on enterprise-class feature robustness, reliability, firm adherence to SQL standards (it supports 160/179 of the mandatory requirements of SQL:2008), a very strong security model, high degrees of programming flexibility, and overall excellent OLTP performance and scalability with minimal tuning and work-arounds being necessary.

Because PostgreSQL is so feature rich, there is occasionally a wrong perception that says it must be difficult to use. In fact, just the opposite is true. While PostgreSQL is indeed a robust set of software, its features are cleanly implemented, thoroughly tested, standards compliant, and are extremely well documented. In other words, PostgreSQL ease-of-use factor is actually quite high.

In addition, with Postgres Plus Advanced Server, those moving to PostgreSQL from Oracle will be immediately productive due to Advanced Server's built-in Oracle compatibility. DBAs and developers can use existing Oracle code and continue to write new stored procedures and other database objects (e.g. functions, etc.) in native Oracle PL/SQL and run it against Postgres Plus Advanced Server. In addition, Postgres Plus Advanced Server offers Oracle data dictionary view compatibility, Oracle performance/wait interface objects, Oracle compatible utilities (e.g. SQL\*Loader), SQL Profiler, and much more. In the end, for Oracle users, it is much easier to move to PostgreSQL than MySQL since they can concentrate on using their existing skills rather than learning new ones.

When it comes to getting started, MySQL is trivial to initially install and set up, however, advanced configurations can easily be overly complex to implement due to MySQL's lack of more sophisticated features and capabilities. With respect to installing and configuring PostgreSQL, today all Postgres Plus installations sport a straightforward graphical installer that includes an out-of-the-box tuning wizard, which smartly installs PostgreSQL taking into account available machine resources and the read/write usage pattern of the application. Of course, any PostgreSQL installation can be tuned after the fact as well via a number of fine grained configuration parameters that give DBAs and Developers complete control over database performance and behavior. All of these configuration options are well documented in Postgres Plus' excellent documentation on the EnterpriseDB website.

From an application perspective, MySQL is good for heavy website querying and the light to medium transaction loads experienced by many web companies and startups. Postgres Plus is best suited for applications that place a high premium on meeting high-speed/heavy traffic OLTP work. Such systems include Point Of Sale, Billing, and Operational Data Stores in various market segments such as Social Networking Websites, Enterprise 2.0 companies, and Financial based applications that experience heavy read AND write loads.

## Core Database Features

Core Database Features	PostgreSQL	Postgres Plus Adv. Server	MySQL 5.5 Enterprise	Comments
Multi-Platform Support	Lin32/64 Win Mac	Lin32/64 Win Mac Solaris HPUX	Linux32/64 Win Mac Solaris Unix (HP, AIX)	
Pluggable Storage Engine	N	N	Y	
Packaged Tuning	Install Time Tuning	DynaTune	Y	MySQL Enterprise ships with the Enterprise Monitor and its performance advisors
Fully ACID Compliant	Y	Y	Y	
ANSI Constraints	Y	Y	Y	
Unicode support	Y	Y	Y	
Schemas support	Y	Y	N	
Data Types	Numeric types: smallint integer bigint decimal numeric real double precision serial (autoincrement) bigserial (autoincrement) Monetary types: money Character types: varchar char text Binary Data types: bytea Data/Time types: timestamp (no timezone) timestamp (w/ timezone) date time (no timezone) time (w/ timezone) interval	Numeric types: smallint integer bigint decimal numeric real double precision serial (autoincrement) bigserial (autoincrement) Monetary types: money Character types: varchar char text Binary Data types: bytea Data/Time types: timestamp (no timezone) timestamp (w/ timezone) date time (no timezone) time (w/ timezone) interval	Numeric types: bit tinyint bool (tinyint) smallint mediumint int bigint serial float double float decimal Date types: date datetime timestamp time year String types: char varchar binary varbinary tinyblob	For MySQL, auto-increment is an attribute of integer or float types.  Note: <a href="#">InnoDB</a> permits storage of values that exceed the data range for a type.

	Boolean Type: boolean (t / f / unknown) Enumerated types Geometric types: point line lseg box path polygon circle Network Address types: cidr inet macaddr Bit String types: bit bit varying Text Search types: tsvector tsquery UUID type XML type Array types for all above Composite types	Boolean Type: boolean (t / f / unknown) Enumerated types Geometric types: point line lseg box path polygon circle Network Address types: cidr inet macaddr Bit String types: bit bit varying Text Search types: tsvector tsquery UUID type XML type Array types for all above Composite types	tinytext blob text mediumblob mediumtext longblob longtext enum set	
Domain Constraints	Y	Y	N	
Exclusion Constraints	Y	Y	N	Allow enforcement of complex conditions with a simple option to an ALTER TABLE command.
Sequences	Y	Y	N	
Object Type support	Y	Y	N	
Inheritance	Y	Y	N	
User Defined Data Types	Y	Y	N	
LOB support	Y	Y	Y	
General Index Types	b-tree (w/reverse) hash expression partial bitmap (in-memory only) GiST (replaces rtree) GIN Custom	b-tree (w/reverse) hash expression partial bitmap (in-memory only) GiST (replaces rtree) GIN Custom	b-tree hash rtree	
Clustered Indexes	Y	Y	Y	

Function-based Indexes	Y	Y	N	
Spatial Index support	Y	Y	Y	Spatial support only offered in MySQL's not-transactional MyISAM engine
Index Organized Tables	N	Y	Y	InnoDB is index-organized in MySQL
Primary Keys	Y	Y	Y	
Foreign Keys	Y	Y	Y	Foreign keys only available in InnoDB and PBXT engines for MySQL
Cascaded Delete	Restrict Delete Set Null	Restrict Delete Set Null	Y	
Read Only Views	Y	Y	Y	
Updateable Views	Y*	Y*	Y	* using Rules engine
Max. Tables in Views	No Limit	No Limit	61	
Temporary Tables	Y	Y	Y	
Un-logged Tables	Y	N	N	* PostgreSQL 9.1 due Summer 2011
Data Partitioning	Range List Composite *	Range List Composite	Range List Hash Key Composite	* Constraint Exclusions
Index Partitioning	Y	Y	Y	
Online Alter Table	Y with Read only	Y with Read only	Only add column supported	
Drop Column support	Y	Y	Y	
Tablespaces	Y	Y	Y	Tablespaces only used for MySQL InnoDB and Cluster engines

## Core Database Features Commentary:

In general Postgres Plus has a larger, more robust and mature set of database features evidenced by the extensive data type and indexing support. In addition, users can create their own data types for special needs. Postgres Plus also lends itself more readily to object oriented application programming techniques with features that include object type support and inheritance, which save time and provide additional integrity to the data and application.

MySQL database features are more limited and narrow in scope primarily because of a focus on its application sweet spot of large web applications that don't require the type of data integrity best addressed by features embedded in the core database.

## Database Capacities

Database Capacities	Postgres Plus Std. Server	Postgres Plus Adv. Server	MySQL 5.5 Enterprise	Comments
CPU Cores Utilization	Performant up to 32	Performant up to 32	4-?	The InnoDB and Cluster storage engines can address more than 4 CPU's/cores in MySQL, but all other engines cannot scale past 4.
Max Table Size	32 TB	32 TB	64 TB	
Max Row Size	1.6 TB	1.6 TB	8000 bytes (excluding VARBINARY, VARCHAR, BLOB, or TEXT columns)	
Max Columns / row	250-1600 depending on type	250-1600 depending on type	InnoDB is limited to 1000 columns	
Max Blob/Clob size	1 GB (text, bytea) - stored inline or 2 GB (stored in pg_largeobject)	1 GB (text, bytea) - stored inline or 2 GB (stored in pg_largeobject)	4 GB (longtext, longblob)	
Max CHAR size	1 GB	1 GB	64 KB	
Max NUMBER size	Unlimited	Unlimited	64 bits	
Min DATE value	-4713	-4713	1000	
Max DATE value	5874897	5874897	9999	
Max column name size	63	63	64	

### Database Capacities Commentary:

Except for the Maximum Table Size and the size limit for Blob/Clobs, Postgres Plus capacities are larger than MySQL. It is not uncommon for users of PostgreSQL or Postgres Plus to have database sizes in the terabyte range.

## Transaction Programming and Control

Transaction Prog./Control	Postgres Plus Std. Server	Postgres Plus Adv. Server	MySQL 5.5 Enterprise	Comments
Crash recovery	Y	Y	Y	MySQL offers crash recovery in the InnoDB and Cluster storage engines, however overall server crash recovery can be a problem with MyISAM tables and the underlying MySQL data dictionary, which is MyISAM-based
ACID transaction support	Y	Y	Y	InnoDB and Cluster offer ACID support
Triggers	Table based Column based	Table based Column based	Table based	
Stored Functions/Procs	Y	Y	Y	
Rules engine	Y	Y	N	A query re-write facility.
Nested Transactions	Y	Y	N	
Check Constraints	Y	Y	N	
MVCC	Y	Y	Y	MVCC is only available in the InnoDB and PBXT storage engines in MySQL
Row-level locking	Y	Y	Y	Row locks are found in InnoDB; page locking is used in most other MySQL engines
Transactional DDL	Y	Y	N	Rollback of DDL changes.
Cursors	Y	Y	Y	
Concurrent Transaction Limit	Unlimited	Unlimited	1023	
XA support	Y	Y	Y	
Group commit	Y	Y	Y	
Savepoint support	Y	Y	Y	
Configurable checkpoints	Y	Y	Y	

### Transaction Programming Control Commentary:

Postgres Plus has an edge over MySQL in various areas of transaction management and control. Postgres Plus has column based triggers, a rules engine, and nested transactions which give application developers and DBA's a wealth of options for attacking complex OLTP issues in the database. DDL in Postgres Plus is also transactional, meaning you can roll back schema changes while the database is online; such capabilities do not exist in MySQL.

## Query Capabilities

Query Capabilities	Postgres Plus Std. Server	Postgres Plus Adv. Server	MySQL 5.5 Enterprise	Comments
Full Text Search	Y	Y	Y	MyISAM supports full text
Recursive Queries	Y	Y	N	
Query Optimization Hints	N	Y	Y	
Query Analyzer/monitor	N	Y	Y	
Join Limit per Query	Unlimited	Unlimited	61	
Plan Join types	Nested-Loop Merge-Join Hash-Join	Nested-Loop Merge-Join Hash-Join	Nested-Loop Merge-Join	
Indexes usable per query	Unlimited	Unlimited	61	
Cost based optimizer	Y	Y	Y	
Rules engine	Y	Y	N	Allows re-writing queries to more efficient forms.
Graphical Query Designer	Y	Y	Y	
Case insensitivity supported	Y	Y	Y	
Correlated Sub-queries	Y	Y	Y	

### Query Capabilities Commentary:

In general, the Postgres Plus query capabilities have some advantages over MySQL. They include a recursive query option (which can be extremely effective), and a wide variety of join types available to the PostgreSQL Query Planner. This last point is worth noting, as it is not evident from the table why PostgreSQL does not support explicit query hints or supply a query analyzer. The reason those features are absent (they are in Postgres Plus Advanced Server but this is a consequence of the Oracle compatibility) is that the PostgreSQL Query Planner is extremely efficient, has many join types at its disposal, and even includes features to remove unnecessary joins before execution. Finally, the PostgreSQL Rules system (or more precisely speaking, the query rewrite rule system) provides a powerful and flexible tool for DBAs and application developers.

## Business Intelligence and Data Warehousing

BI/Data Warehousing	PostgreSQL	Postgres Plus Adv. Server	MySQL 5.5 Enterprise	Comments
Bitmap Index Joins	Y	Y	N	
Summary Tables	Y	Y	N	
Aggregate functions	Y	Y	Y	
Windowing functions	Y	Y	N	
Common Table Expressions	Y	Y	N	
Direct path load API	Y	Y	Y	
Expression-based Indexes	Y	Y	N	
Materialized views	Emulated with Stored Procedures/Triggers	Emulated with Stored Procedures	N	
Heterogeneous datasources	Y	Y	N	Allows querying external data formats as a table.
External tables	N	N	Y	
Union	Y	Y	Y	
Intersect	Y	Y	N	
Except	Y	Y	N	
Inner Joins	Y	Y	Y	
Outer Joins	Y	Y	Y	
Inner Selects	Y	Y	Y	
Merge Joins	Y	Y	Y	
Parallel Query	Y*	Y*	Y*	* with GridSQL for PostgreSQL and third-party storage engine vendors for MySQL
Optimizer statistics mgmt	Y	Y	Y	
Set returning functions	Y	Y	Y	Use SETOF function
Sample Query scan	Y	Y	Y	EXPLAIN

### Business Intelligence and Data Warehousing Commentary:

Postgres Plus contains many critical database features that are used in data warehousing applications. MySQL generally uses the MyISAM storage engine which is well suited for small data warehousing applications but requires third-party storage vendors to tackle any large data volumes. It is also worth noting that the heterogeneous datasource support (viaSQL/MED) in PostgreSQL can be particularly interesting as it allows data in external formats including NoSQL databases to be integrated into an ACID based transactional PostgreSQL system.

## Network/Distributed Services

Network/Distributed Services	PostgreSQL	Postgres Plus Adv. Server	MySQL 5.5 Enterprise	Comments
Connection Management	pg_pool II for multi-node, PgBouncer for single node	pg_pool II for multi-node, PgBouncer for single node	Built-in	
Connection Pooling	Y	Y	Y	
Distributed Federated Queries	N	Y	N	The Federated storage engine for MySQL was discontinued as a production-ready engine in 5.1 and above
Parallel Query	N	N	With 3 <sup>rd</sup> party vendors	
Distributed Memory Caching	Y (memcached)	Y (InfiniteCache)	Y (memcached)	
Distributed Transactions using 2 Phase Commit	Y	Y	Y	
Native Database Links	Y	Y	N	
Heterogeneous DB Links	N	Y	N	

### Network/Distributed Services Commentary:

MySQL introduced the Federated storage engine in MySQL 5.0, which was designed to handle federated SQL statements between different physical MySQL Servers. The Federated storage engine was relegated back to beta quality in MySQL 5.1 and above, is not enabled by default, and is not being actively worked at the time of this writing.

## Bulk Data Management/Protection

Bulk Data Mgt/Protection	PostgreSQL	Postgres Plus Adv. Server	MySQL 5.5 Enterprise	Comments
Array-INSERT based Loader	Y	Y	Y	
High Speed Bulk Data Loader	N	Y*	N	*includes parallel load
Migration Tools	MySQL Oracle SQL Server Sybase	MySQL Oracle SQL Server Sybase	Obsoleted/EOL'd	
Online Reorganization	Y	Y	N	
Hot Standby Database	Y	Y	Y	
Online Backup	Y	Y	Y	Some restrictions apply with MySQL such as no DML/DLL activity, etc.
Online Recovery	Y	Y	N	
Parallel Recovery	Y	Y	N	
Point-In-Time Recovery	Y	Y	Y	
Roll Forward Recovery	Y	Y	Y	
Incremental Backup via backup command	N	N	N	
Incremental Backup via Logging	Y	Y	Y	
Compressed Backups	Y	Y	Y	MySQL/InnoDB Hot backup required

### Bulk Data Mgt/Protection Commentary:

Both MySQL and Postgres Plus possess the requisite backup and restore options expected in an RDBMS. However, in the move to MySQL Workbench, the MySQL Migration Toolkit has been dropped by Oracle so MySQL currently lacks the migration tools offered by EnterpriseDB for PostgreSQL.

## Security Features

Security Features	PostgreSQL	Postgres Plus Adv. Server	MySQL 5.5 Enterprise	Comments
Integration with OS Security	Y	Y	N	MySQL Cluster 7.0 can interact with LDAP directories
Password Management	Y	Y	Y	
Role based security	Y	Y	N	
Groups support	Y	Y	N	
Grant Privileges	Y	Y	Y	
Deny Privileges	Y	Y	N	
Encryption Options	Password-MD5 Column Encryption Partition Encryption Network Passwords-Double MD5 Encrypted Network Data – SSL Client Encryption	Password-MD5 Column Encryption Partition Encryption Network Passwords-Double MD5 Encrypted Network Data – SSL Client Encryption	Password – Hash Data Encryption Network Data – SSL	
Pluggable Authentication Methods	Trust Password GSSAPI SSPI Kerberos Identity based LDAP SSL PAM RADIUS	Trust Password GSSAPI SSPI Kerberos Identity based LDAP SSL PAM RADIUS	Password	
Column Level Permissions	Y	Y	Y	
Built-in SQL Injection prevention	N*	Y	N	*available through subscription
Obfuscation for Server side code objects (e.g. stored procedures, etc.)	Y	Y	N	
Built-in Auditing	N	Y	N	
Grant/Revoke in Schemas	Y	Y	?	Supports mass permissions changes for easier administration.

### Security Features Commentary:

Security is one of the areas offering the clearest differences between Postgres Plus and MySQL. Security has always been a major focus of PostgreSQL, which possesses an arsenal of tools and options for securing data and accesses to the database. The security distinction is an especially important one as databases become more pervasive in cloud deployments and virtualized environments where hardware infrastructure is being shared, often times with people external to your organization. EnterpriseDB's recent introduction of SQL/Protect to prevent SQL Injection attacks at the database layer is just another example of the community's commitment to protecting PostgreSQL data and databases.

## DBA Tools

DBA Tools	PostgreSQL	Postgres Plus Adv. Server	MySQL 5.5 Enterprise	Comments
Integrated One-click installer	Y	Y	N	
Package Manager for add-on modules	Y	Y	N	
Automatic Update Service	Y	Y	Y	
Update Monitor	Y	Y	N	
Technical Alerts	Y	Y	Y	
Easy (in-place) version upgrades	Y	Y	N	
Integrated Admin Console	Y Administration Schema Object Browser SQL Syntax Highlighting Connection/Instance Mgt Log Viewer SQL Development Database Modeling* Replication Management Forward / Reverse Engineer Wizards/Dialogs Custom Plug-in support	Y Administration Schema Object Browser SQL Syntax Highlighting Connection/Instance Mgt Log Viewer SQL Development Database Modeling* Replication Management Forward / Reverse Engineer Wizards/Dialogs Custom Plug-in support	Y Administration Schema Object Browser SQL Syntax Highlighting Connection/Instance Mgt Log Viewer SQL Development SSH Connection Tunnel Database Modeling Replication Management Forward / Reverse Engineer Wizards/Dialogs Custom Plug-in support	* 3 <sup>rd</sup> Party tools
Diagnostics Functions	Y	Y	Y	
Wait-based interface	N	Y	Y	
Diagnostics GUI Tools	N	N	Y	
Index Advisor	N	Y	Y	
Metering, Monitoring, Alerts	Y	Y	Y	
Replication Console	N*	Y**	N	*included with Subscription **supports Oracle and SQL Server replication

Migration Console	N	Y	N	
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## DBA Tools Commentary:

Both Postgres Plus and MySQL offer automatic software maintenance and technical alerts for DBAs to keep their systems up to date. Both offer robust and mature administration consoles for managing the database, sophisticated monitoring tools for keeping tabs on the database's health, and both contain various tools for diagnostic with the exception of a graphical diagnostic tool for Postgres Plus. For those organizations though in need of sophisticated auditing and reporting, the fine grained audit logging offered in Postgres Plus Advanced Server meets those needs more adequately than MySQL.

## Developer Tools

Developer Functionality	PostgreSQL	Postgres Plus Adv. Server	MySQL 5.5 Enterprise	Comments
Integrated Devel. Console	Y Object Management Visual Query	Y Object Management Visual Query	Y Color syntax highlighting Visual Query	
Client Connectors	ODBC JDBC .NET C++ ECPG ©	ODBC JDBC .NET C++ ECPG ©(C) OCI	ODBC JDBC .NET C C++ Open Office	
Built-in Procedural Languages	Java Perl Python Ruby Tcl C/C++ PL/pgSQL	Java Perl Python Ruby Tcl C/C++ PL/pgSQL PL/SQL	SQL/PSM	
Procedural Language Debugger	Y	Y	N	
Code Profiler	Y	Y	N	
Server side debugger	Y	Y	N	
Debugging support for triggers	Y	Y	N	
Procedural Language obfuscation	Y	Y	N	
Library Interfaces	Java	Java	Java	

	ODBC Perl Python Ruby C, C++ PHP Lisp Scheme Qt	ODBC Perl Python Ruby C, C++ PHP Lisp Scheme Qt	MySQL embedded Perl Python Ruby C, C++ PHP Tcl	
Built In Packages	N	Y	N	
User Defined Packages	N	Y	N	
Create Function support	Y	Y	Y	
Custom aggregate functions	Yes, in any language	Yes, in any language	Yes, C only	
Server Side programming	Stable and Mature	Stable and Mature	Recently added	
Graphical Explain tool	Y	Y	Y	
Embedded database library	N	N	Y	
Listen/Notify functions	Y	Y	N	

## Developer Tools Commentary:

Both Postgres Plus and MySQL have extensive connector and library interface support for developers including an integrated development console for creating and writing code. However, Postgres Plus offers developers multiple language choices for their procedural language as well for Stored Procedures and Triggers, while MySQL offers only their own SQL/PSM, which has not been updated in over 5 years. Also worth noting is the server side trigger and procedural language debugger which are available in PostgreSQL but absent in MySQL. In addition, Postgres Plus Advanced Server Oracle compatibility offers many features that are extensively used today but don't require the use of Oracle or an Oracle skill set. For instance, there are many features like built-in packages of functions and the ability to create custom packages that support object oriented programming efforts. This provides a positive growth path and increased capabilities for developers as their applications grow and require more sophisticated features. For ISV's however, MySQL does offer an embedded database option while PostgreSQL does not offer a slimmed down embedded database option applicable for multiple devices and specialized application needs.

## Scalability Solutions

Scalability Solutions	PostgreSQL	Postgres Plus Adv. Server	MySQL 5.5 Enterprise	Comments
Horizontal Scalability	Replication	Replication	Replication or via third party storage engines	
Vertical Scalability	Excellent Core Use (32-64)	Excellent Core Use (32-64)	Depends on engine	InnoDB and Cluster can use more than 4 CPU's/cores; all other engines cannot scale

## Scalability Solutions Commentary:

MySQL scales out horizontally via replication and also makes use of memcached, a caching utility long used in the PostgreSQL community. GridSQL with Postgres Plus provides near linear scalability for partitioned data across commodity hardware and provides parallel query capability for extremely fast response times in data warehousing type applications. Infinite Cache in Postgres Plus Advanced Server has proven to be multiple times faster than community PostgreSQL in read-mostly and read-write applications and can store entire multi-gigabyte databases in memory utilizing compression for lightning fast database-in-memory performance.

## High Availability Solutions

High Availability Solutions	PostgreSQL	Postgres Plus Adv. Server	MySQL 5.5 Enterprise	Comments
Replication	Built-in streaming replication Slony SteelEye Bucardo Londiste	Built-in streaming replication Slony SteelEye Bucardo Londiste	Y	* native replication as well as 3 <sup>rd</sup> party tools
Synchronous	9.1	9.1	Semi-synchronous	
Oracle Replication	Y	Y	N	
SQL Server Replication	Y	Y	N	
Multi-Master Replication	Bucardo	Bucardo	Y	
Logical and physical standby database	Y*	Y*	Y	* PPAS has physical standby. Logical Standby in 9.0 release
Fast start fault recovery	Y*	Y*	N	* can adjust checkpoint_interval for flushing buffers to disk
Backup and recovery	Y*	Y*	Y (requires InnoDB Hot Backup)	* Online/hot backups supported as well as PITR
Clustering	RedHat Cluster Veritas Cluster LinuxHA	RedHat Cluster Veritas Cluster LinuxHA	MySQL Cluster	

## High Availability Solutions Commentary:

PostgreSQL and Postgres Plus now have integrated replication, a long awaited feature which includes streaming replication and hot-standby capabilities. Postgres Plus has traditionally leaned on a variety of excellent 3<sup>rd</sup> party replication and High Availability products which are also still available. MySQL Cluster is an excellent solution for telecommunication-style applications.

## Open Source Community

Open Source Community	PostgreSQL	Postgres Plus Adv. Server	MySQL 5.5 Enterprise	Comments
License Type	PostgreSQL License (similar to BSD)	Proprietary	GPLv2	
Community Type	True open source	Open Source Based	Controlled by Oracle, but does accept patches from the community	
Community Size	Core Team 7 Major Contributors 25 Contributors 39 Committers 19 Hackers List 1800+ General Mail List 3,800+ Announce List 31,000+	Same as PostgreSQL plus additional developers employed by EnterpriseDB.	Unknown	PostgreSQL numbers based on v9.0
Leadership	Long Term Stability	Long Term Stability	Various forks	
Total Development History	21 years	5 (21)	15 years	

### Open Source Community Commentary:

PostgreSQL always has been and still remains a true open source database. It is not controlled by any single commercial entity. Community members can suggest, create, submit, and have features accepted without interference or delay from a commercial entity. The active community is large and vibrant and under consistently stable leadership since the beginning of the project producing high quality releases in terms of features and stability. EnterpriseDB has a very positive relationship with the community on many fronts including technical and marketing relationships.

MySQL's community leadership has fractured and splintered into multiple other open source projects.

## Conclusion

At EnterpriseDB we understand that adopting a new open source database is not a trivial task. You have lots of questions needing answers, schedules to keep, and processes to follow. EnterpriseDB has helped thousands of organizations like yours investigate, evaluate, prove, develop, and deploy their open source solutions. To make your work easier and faster we have special [self-service](#) sections of our website dedicated to assisting you each step of the way.

Just getting started? Visit: <http://www.enterprisedb.com/solutions/getting-started-postgresql>

Conducting an evaluation? Visit: <http://www.enterprisedb.com/solutions/postgresql-evaluations>

Already developing with Postgre? Visit: <http://www.enterprisedb.com/solutions/postgresql-development>

Deploying a PostgreSQL based application? Visit: <http://www.enterprisedb.com/solutions/postgresql-deployment>

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## About EnterpriseDB

[EnterpriseDB](#) is the leading provider of enterprise class products and services based on PostgreSQL, the world's most advanced open source database. The company's Postgres Plus products are ideally suited for transaction-intensive applications requiring superior performance, massive scalability, and compatibility with proprietary database products. Postgres Plus products provide an economical open source alternative or complement to proprietary databases without sacrificing features or quality.

[EnterpriseDB](#) has offices in North America, Europe, Japan, and India. The company was founded in 2004 and is headquartered in Bedford, MA. For more information, please visit <http://www.enterprisedb.com>.